

Pest Update (December 2-9, 2009)

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Available on the net at:

<http://www.state.sd.us/doa/Forestry/educational-information/Pest-Alert-Archives.htm>.

Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions and the label is the final authority for a product's use on a particular pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such but it is the reader's responsibility to determine if they can legally apply any product identified in this publication.

In this issue

Deer concerns – what plants don't they like and what can I spray?

I received calls every fall asking what trees and shrubs are “deer proof.”

There is no such plant, of course. If preferred food sources are not available, deer will sometimes eat almost anything, or at least nibble on it. For example, spruce is not considered a preferred food source for deer – more starvation food - but a number of years ago during a winter with heavy snowfall that restricted deer movement, deer stripped spruce out of shelterbelts in eastern South Dakota. I am willing to bet if you show this list to anyone in the Black Hills – where there is very heavy deer pressure in town - there are at least several plants listed below that probably someone has had eaten out of their yard by deer. With that said, here is the list of *rarely* eaten plants:

Alnus glutinosa – European alder

Berberis thunbergii – Japanese barberry

Betula nigra – river birch

Betula papyrifera – paper birch

Buxus micophylla – Korean boxwood

Caragana arborescens - Siberian peashrub

Catalpa speciosa – northern catalpa

Cercis canadensis – eastern redbud
Cornus sericea - redosier dogwood
Cotinus coggygria - smoketree
Forsythia ovata - forsythia
Ginkgo biloba - ginkgo
Gledistia triacanthos – honeylocust
Juniperus spp – almost all junipers
Ostrya virginiana – ironwood or also known as hophornbeam
Philadelphus coronaries – sweet mockorange
Picea spp – all spruce
Platanus occidentalis – sycamore
Potentilla fruticosa – all potentilla
Robina pseudoacacia – black locust
Sambucus canadensis - elderberry
Spiraea prunifolia – Bridalwreath spirea
Syringa spp – all lilacs
Viburnum spp – all viburnums

Again, this is not a perfect list. Deer can, and will, rub on almost any plant and some of these plants such as forsythia, lilacs and viburnums are considered “deer proof” but are favorite foods of rabbits! In addition, some of these plants, such as sycamore and redbud, have limited hardiness. And if you want *more* deer damage, plant mountainash (*Sorbus* spp), yews (*Taxus* spp) and arborvitae (*Thuja occidentalis*) – deer love them!

What can I do to reduce browsing injury (and a homemade recipe at the end)

Another approach, or used in combination, is to treat the plant or yard with a repellent. **First, the amount of repellent needed is directly proportional to the deer’s preference of the plant being protected.** Plants that deer prefer are going to require more repellent than those that are not. Repellents work through a number of mechanisms, most commonly grouped as odor-based and taste-based. Generally speaking, odor-based repellents work better than taste-based (and taste-based don’t work until they take a bite). The most common odor-based products, such as Deer Away and Big Game Repellent, have putrescent whole eggs as their active ingredient. Eggs are considered the most effective deterrent and egg-based products are often used as the standard for comparisons. Taste-based products, such as those containing peppers, are usually not as effective as repellents but as many people swear by them as at them and a multi-tactic approach to deer, including repellents, may be the most effective means of managing these mammals. As an interesting side note, a recently published study (*HortScience* 40(6); 1810-1814) found that hydrolyzed casein, found in baby formula, with a dilution of Elmer’s Glue-All for a sticker, was an effective homemade repellent for deer!

It is the protein found in milk and eggs that apparently the deer do not like so another *possible* “home” remedy is to add 6 eggs into a gallon of water, stir, then add about 2 or 3 cups of milk, once stirred again and two more gallons of water and a cup of white latex paint. Stir again until all is blended and spray on to the plant. If you added the right amount of paint there should be a very faint white color on the bark of the tree being sprayed (it will wear off). This may be effective for weeks, not months, so expect to have to reapply several times. Don’t forget to clean out the sprayer after each use!